**MICROBIOLOGY QUIZ #1**

Multiple Choice /7

1. Which of the following statements about viruses is false?

a) The size of viruses is measured in nanometers.

b) The genetic material of viruses can be DNA or RNA.

c) Viruses tend to infect a specific range of cell types.

d) Viruses can replicate through lytic or lysogenic cycles.

e) Viruses infect animals and bacteria, but not plants.

2. Which of the following does not occur during viral replication?

a) The virus recognizes and attaches to a host cell.

b) The viral cytoplasm is evenly divided.

c) The viral genetic material tells the host cell to make copies of viral proteins.

d) New virus particles are assembled within the host cell.

e) The new virus particles are released from the infected cell.

3. What features of eukaryotic cells do bacteria possess?

a) Nucleolus

b) Chloroplast

c) Ribosomes

d) Endoplasmic reticulum

e) Vacuole

4. Where would you not expect to find Archaebacteria?

a) Deep sea vent

b) Salty dry riverbed

c) Being used to clean up an oil spill

d) Inside your intestine

e) Inside your lungs

5. What information does the Gram Stain test reveal?

a) If a bacterium is photosynthetic.

b) If a bacterium prefers oxygen to non-oxygen environments.

c) The shape of clusters that bacteria form.

d) The composition of the bacterial cell wall.

e) If a bacterium is toxic to humans.

6. Which of the following is not a member of the Protist kingdom?

a) Seaweed

b) Euglena

c) Paramecium

d) Amoeba

e) *E. coli*

7. Which of the following illnesses is caused by a protist?

a) Influenza

b) Strep throat

c) Polio

d) Tetanus

e) Malaria

Ordering /5

Arrange the following in order of size, from smallest to largest:

- Bacteriophage virus Smallest \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

- Unicellular green algae \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

- DNA molecule \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

- Bacterium \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

- Multicellular slime mould Largest \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Compare and Contrast /7

Euglena is classified as a plant-like protist. Classify the following features as plant-like or not plant-like:

- Chloroplast with Chlorophyll

- Stores food as starch

- Cells engulf solid food in the dark

- No cell wall, has a pellicle

- Flagellum for locomotion

- Eye spot to detect low light conditions

- Vacuoles

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| --- | --- |
| Plant-like | Not Plant-like |
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Labelling /14

On the attached sheet, label the following features, including the names of the organisms, as well:

Bacteriophage Virus

Genetic material

Capsid protein head

Paramecium

Nucleus

Cilia

Oral groove

Anal pore

Bacterium

Cell wall

Cell membrane

DNA chromosome

Flagellum

Cytoplasm